To: Ostrander, David[Ostrander.David@epa.gov]; Card, Joan[Card.Joan@epa.gov]; Ackerman,

Joyce[Ackerman.Joyce@epa.gov]; McGrath, Shaun[McGrath.Shaun@epa.gov]

Cc: Way, Steven[way.steven@epa.gov]

From: Hestmark, Martin

Sent: Mon 9/14/2015 8:55:42 PM

Subject: RE: R8 Q&As

As I remember, in 2009 DRMS estimated the flow (seasonal variation) between 150 and 300 GPM. In the May 2015 ER Action/Work Plan the flow measurements "since 2014 have been 30 to 75 gallons per minute."

From: Hestmark, Martin

Sent: Monday, September 14, 2015 2:50 PM

To: Ostrander, David; Card, Joan; Ackerman, Joyce; McGrath, Shaun

Cc: Way, Steven

Subject: RE: R8 Q&As

Are you talking about the same things? Potential vs actual?

From: Ostrander, David

Sent: Monday, September 14, 2015 2:43 PM

To: Card, Joan; Ackerman, Joyce; McGrath, Shaun

Cc: Way, Steven; Hestmark, Martin

Subject: RE: R8 Q&As

For two it could be 8000 gpm with appropriate head.

From: Card, Joan

Sent: Monday, September 14, 2015 2:42 PM

To: Ostrander, David; Ackerman, Joyce; McGrath, Shaun

Cc: Way, Steven; Hestmark, Martin

Subject: RE: R8 Q&As

So the two pipes have a 4000 gpm capacity? Or higher?

From: Ostrander, David

Sent: Monday, September 14, 2015 2:40 PM

To: Card, Joan; Ackerman, Joyce; McGrath, Shaun

Cc: Way, Steven; Hestmark, Martin

Subject: RE: R8 Q&As

I looked at a couple of charts. Flow volume is tied to head and velocity. The lowest flow velocity on one chart had a corresponding rate of 350 gpm at a velocity of 1.1 fps. For two pipes that would be 700 gpm. Flow rates went as high as 4000 gpm with a velocity of 12.8 fps.

From: Card, Joan

Sent: Monday, September 14, 2015 2:33 PM

To: Ostrander, David; Ackerman, Joyce; McGrath, Shaun

Cc: Way, Steven; Hestmark, Martin

Subject: RE: R8 Q&As

David, is there a maximum flow estimate for the two pipes? That might be a follow up question. Joan

From: Ostrander, David

Sent: Monday, September 14, 2015 12:53 PM **To:** Ackerman, Joyce; McGrath, Shaun; Card, Joan

Cc: Way, Steven; Hestmark, Martin

Subject: RE: R8 Q&As

revised

Q: EPA's contractor caused a spill of diesel fuel on a property owners land. What have you done to report this incident and what did you do about?

A: EPA had placed a generator on the property on the property of Li'l Fishes to assist the owner with maintaining the health of his fish ponds. The generator powered an aerator and/or water hose for the ponds. On September 10, 2015, the property owner reported that some diesel spill had spilled on the ground from the generator. He reportedly told another party that the volume was 1-2 gallons. An EPA On-Scene Coordinator responded the same day accompanied by EPA contractors. The OSC did not see or smell any evidence of a fuel spill. The OSC requested the property owner to delineate the area of the spill, and he pointed to an area approximately 4 feet wide by 4 feet long. Despite seeing no evidence of a fuel spill, the OSC directed the contractors to conduct a shallow scrape of soil approximately one inch deep, drum up the soils, and take them off-site for proper disposal. The OSC directed the contractors to take a confirmation sample after the removal of soils and those laboratory results are pending. The area in question was approximately 25 feet from one of the fish ponds. The OSC contacted the Colorado Department of Public Health and Environment spill line and described the circumstances, and CDPHE stated that in these circumstances, only spills over 25 gallons needed to be reported. The alleged spill was not reported to the NRC as there was no impact or threat to surface water. Sample results will be provided to the property owner when they are available.

Q: September 9, 2015 Article in Colorado Watchdog.org entitled "Colorado mine owner: EPA lied in congressional hearing", Todd Hennis, Gold King's owner is quoted as saying:

"It shows there was no flow of water coming out," Hennis said. "They are calling it an act of God when it was an act of government. The photos clearly show the EPA backfilled the portal to block water from coming out and they blocked the discharge pipes at the same time." "It's absolute baloney of the worst sort," Hennis said immediately after the hearing. "They blocked off the flow of water out of the drain pipes and they created the huge wall of water in the Gold King by their actions last year."

A: On September 11, 2014, work began to remove the material that was blocking the Gold King adit. The work stopped when it was determined that the elevation of the adit floor was estimated to be six (6) feet below the waste-dump surface elevation. The presence of water below two (2) 24-inch pipes indicated the current flow of water was coming out at least four (4) feet below the roof of the adit, indicating approximately six (6) feet of impounded water above the estimated adit floor elevation. On September 12, 2014, two (2) drain pipes were placed at the base of the blockage to capture the on- going mine water drainage and direct flow into the existing flume channel installed in 2008 by DRMS. The adit area was backfilled and compacted with additional loads of crushed rock to maintain a stable surface at the adit for potential future work. The addition of crushed rock was well back from the adit blockage and did not cause any impoundment of water and the two drain pipes were flowing all of the discharge into the flume channel at the end of the work. The drain pipes were still flowing when workers returned to the site in 2015.